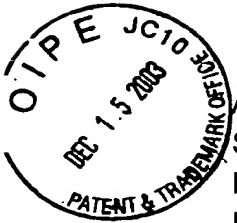


Serial No. 09/712,539

PATENT  
RCA 89,567DIV

#17  
*J. Douglas*  
12/22/01

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES



Applicant : KARL HORLANDER  
Serial No. : 09/712,539  
Filed : NOVEMBER 14, 2000  
For : AN ADAPTIVE VIDEO IMAGE PROCESSING SYSTEM  
Examiner : P. NATNAEL  
Art Unit : 2614

**RECEIVED**

DEC 19 2003

Technology Center 2600

APPEAL BRIEF

May It Please The Honorable Board:

Sir:

The Applicants appeal the final rejection of Claims 1 to 20, 22 to 25, and 29 to 36 of the above-identified application in the Final Rejection mailed April 9, 2003. The \$330.00 fee for filing this Brief is to be charged to Deposit Account No. 07-0832.

Applicants also request a two-month extension for reply for the filing of this appeal brief from August 9, 2003, the date the Notice of Appeal for this application was filed with the Patent Office. The \$420.00 fee for the extension is to be charged to Deposit Account No. 07-0832.

Please charge any additional fee or credit any overpayment to the above-identified Deposit Account.

Three copies of the Brief are enclosed. This page is also submitted in duplicate for fee charging purposes.

Applicants do not request an oral hearing.

12/21/2003 14:00:00 00000116 070832 09712539  
330.00 00

Certificate of Mailing Under 37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, Alexandria, VA 22313-1450 on December 9, 2003.

Joel Fogelson

REAL PARTY IN INTEREST

The real party in interest, the Assignee, is:  
Thomson Licensing S.A., 46 quai Alphonse La Gallo, Boulogne Billancourt,  
92100 FRANCE

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF THE CLAIMS

Claims 1 to 20, 22 to 25, and 29 to 36 are rejected.

Claims 1 to 20, 22 to 25, and 29 to 36, all the claims, are  
appealed.

STATUS OF AMENDMENTS

All amendments were entered and are reflected in the claims  
included in the Appendix.

SUMMARY OF THE INVENTION

The invention concerns a method for protecting video image  
information that may be presented in several different resolution formats with  
condition access information. The method utilizes the conditional access  
information to determine the picture resolutions either available to record the  
video image information or for reproducing such video image information  
once recorded. Methods for determining the display format of video  
information are also presented.

ISSUES

Whether the subject matter of Claims 1 to 20, 22 to 25, and 29  
to 36 are unpatentable under 35 U.S.C. §112, first paragraph.

Whether the subject matter of Claims 10 to 14 are unpatentable  
under 35 U.S.C. §102(e) as being anticipated by Kanota et al. (U.S. Patent #  
5,991,500, hereafter referred to as 'Kanota').

Whether the subject matter of Claims 1 to 8 is unpatentable  
under 35 U.S.C. §103(a) over Bestler et al. (U.S. Patent # 5,680,457,  
hereafter referred to as 'Bestler') in view of Shah-Nazaroff et al., (U.S. Patent  
# 6,157,377, hereafter referred to as 'Shah-Nazaroff').

Whether the subject matter of Claim 9 is unpatentable under 35 U.S.C. §103(a) over Bestler in view of Nagashima et al. (U.S. Patent # 6,275,988, hereafter referred to as 'Nagashima').

Whether the subject matter of Claims 15 to 17 is unpatentable under 35 U.S.C. §103(a) over Kanota.

Whether the subject matter of Claim 18 is unpatentable under 35 U.S.C. §103(a) over Kanota in view of Shah-Nazaroff.

Whether the subject matter of Claims 19, 20, 22, 23, and 30 to 36 is unpatentable under 35 U.S.C. §103(a) over Knudson et al., (U.S. Patent # 6,141,488, hereafter referred to as 'Knudson') in view of Oguro (U.S. Patent # 5,907,656, hereafter referred to as 'Oguro').

Whether the subject matter of Claims 24 to 25 is unpatentable under 35 U.S.C. §103(a) over Knudson in view of Tsukamoto et al. (U.S. Patent # 5,796,828, hereafter referred to as Tsukamoto).

Whether the subject matter of Claim 29 is unpatentable under 35 U.S.C. §103(a) over Knudson in view of Shah-Nazaroff.

#### GROUPING OF THE CLAIMS

Claims 1 to 20, 22 to 25, and 29 to 36, all of the claims, stand together.

#### ARGUMENTS

#### THE 35 U.S.C. § 112 REJECTION OF CLAIMS 1 to 20, 22 to 25, and 29 to 36

Reversal of the Final Rejection ("hereinafter termed rejection") of Claims 1 to 20, 22 to 25, and 29 to 36 under 35 U.S.C. §112, first paragraph respectfully requested. The rejection makes the following crucial errors.

Examiner in the rejection rejected Claims 1 to 20, 22 to 25, and 29 to 36 as not being described in the specification. Specifically, Examiner states that the phrases, "used for determining", "information for determining the display formats available for recording", and "information for determining the picture resolution formats available for recording" are respectively new matter. Applicant disagrees with this rejection.

Applicant submits that such claimed features are present in the specification. For example, beginning on page 6, line 18 of the application, a description is given of video decoder 110 which, "adaptively decodes received broadcast high definition video data to provide either high definition (HD) digital MPEG compatible data, standard definition (SD) digital MPEG compatible video data or an analog composite video signal." This section describes how the video decoder 110 configures VCR 105 to operate in view of such HD, SD, or analog video data considering "control and configuration information conveyed in the ancillary data," (specification, page 6, lines 18-29).

Moreover, beginning on page 7, line 10 of the specification, the operation of VCR 105 is described as to, "adaptively select a signal format for recording or playback, in response to copy protection information" (see Specification, page 7, lines 10-26). This section of the specification also describes an operation of the invention where the copy protection data is used to allow the playback of a particular program in one format (HD) and a second format (SD) after a specific period, where the available formats are determined in view of the copy protection data (see specification, page 7, lines 20-26).

For the reasons given above, Claims 1 to 20, 22 to 25, and 29 to 36 are believed to overcome the rejection under 35 U.S.C. § 112, first paragraph, and Applicant requests that the rejection of these claims be withdrawn.

#### THE 35 U.S.C. §102(e) OF CLAIMS 10 to 14

Reversal of the rejection Claims 10 to 14 under 35 U.S.C. §102(e) under Kanota is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references. over Newberry in view of Kim is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

Claim 10 claims the element of having "video image information and copy protection information associated with a plurality of display formats". The claimed copy protection information is used for "determining display formats available for at least one of: (i) recording said video image information; and (ii) reproducing said recorded video image information". The claimed copy protection information is also used for "adaptively selecting a display format in response to said decoded copy protection information". Support for the claimed elements of Claim 10 are in the specification on page

6, lines 4-29, page 7, lines 10-22, and in other places. These claimed elements are neither disclosed nor suggested in Kanota.

A. As stated above, Claim 10 claims an element decoding copy protection information where such copy protection information comprises data used for "determining the display formats available for at least one of (i) recording said video image information; and (ii) reproducing said recorded video image information." The Examiner cites to a section of Kanota describing the operation of copy protection detector 25, controller 26, encoder 27, and mixer 28 in view of copyright information signal  $S_1$  and copy generation signals  $S_2$ , as to anticipate this claimed feature. Applicant disagrees with the Examiner's assertion.

(10e) Kanota describes  $S_1$  as part of a signal that determines if, "a video signal is subject to copyright," (Kanota, column 5, lines 11-15). Similarly, Kanota describes  $S_2$  as information that determines if, "a signal generation of a video signal may be recorded," (Kanota, column 5, lines 16-20). Neither of these signals  $S_1$  nor  $S_2$  disclose or suggest that such copy protection information is used for "determining the display formats available for at least one of (i) recording said video image information; and (ii) reproducing said recorded video image information," as claimed in Claim 1. Kanota describes the use of  $S_1$  and  $S_2$  in controlling the copying of video information, not the specific display formats available to record video information in, or to reproduce such recorded video as claimed in Claim 1.

The Examiner responded to Applicant's argument regarding  $S_1$  and  $S_2$  by stating that Kanota discloses a copy control for a video signal with copyright signals as superimposed bits in the VBID data of the video signal. Specifically, the Examiner cites to Kanota, "wherein the first bit represents the aspect ratio of the viewable picture that may be displayed from the video signal (e.g., an aspect ratio of 16:9 or an aspect ratio 4:3; and the second bit indicates that a standard system or a letter box system," (Kanota, column 14, lines 14-24). Applicant notes that Kanota's description of VBID data is used as a means of identifying transmitted video data, not as, "copy protection information associated with a plurality of display formats".

Kanota specifically identifies the aspect ratio information and standard/letter box system as, "the identifying data (the A field) constitutes discrimination data related to the picture signal transmission system" (Kanota, column 14, lines 16-18). That is, this part of the VBID is used for identifying the contents of a video data, where the  $S_1$  and  $S_2$  controls whether a copy can be made of video data of a specific display format. Kanota does not

disclose or suggest that such video data, or corresponding copy protection information is "associated with a plurality of display formats".

Moreover, Kanota does not describe an operation where copy protection information is used to or that such copy protection information is used for "determining the display formats available for at least one of (i) recording said video image information; and (ii) reproducing said recorded video image information". As stated above, Kanota only describes the operation of whether video data of a specific display format can be recorded, not an operation of considering "the display formats available" for a recording video data, as claimed in Claim 10. Additionally, Tables 4, 5, and 6, of Kanota show that  $S_1$  and  $S_2$  are for determining the number of generation copies that can be made from video data, not the operation of determining the available display formats of such copies, as suggested by the Examiner.

10(c)  
B. The Examiner also writes in the rejection that the claimed, "adaptively selecting a picture format in response to said copy protection information," of Claim 10 is disclosed in Kanota. Specifically the Examiner states, "depending upon the format of the video signals (e.g., NTSC, PAL, HD, etc.), the particular line intervals in which  $S_1$  and  $S_2$  are superimposed may vary," (Kanota, column 9, lines 63-65). Applicant disagrees with the Examiner's suggestion that Kanota discloses the selection of picture formats, in view of decoded copy protection. Kanota describes as where to put signals  $S_1$  and  $S_2$  for detection by copy protection detector 14 (see Kanota, column 9, line 66 to column 19, line 2). Copy protection detector 14, does not use  $S_1$  and  $S_2$  to, "adaptively selecting a display format in response to said decoded conditional information," as claimed in Claim 1, as suggested by the Examiner. The detector uses signals  $S_1$  and  $S_2$  to determine whether serial copies can be made (see comments in regards to part A for the functions of  $S_1$  and  $S_2$ ).

In response to the above argument, the Examiner states in the rejection that Kanota discloses that, " $S_1$  and  $S_2$  are copy generation signals and depending on display format, the copy generational signals are superposed in the VBI signals. Kanota suggests that copy generation may vary according to display format." (Rejection, page 22, second paragraph) Applicant disagrees because Kanota does not consider display format information, or the available display formats, when considering the creation of copies.

As recited above, Kanota discloses that copy generation signals such as  $S_1$  and  $S_2$  may be located in different locations of a video signal, depending on the format of the video signal (Kanota, column 9, lines 49

column 10, lines 2). That is, Kanota discloses different embodiments of where to put  $S_1$  and  $S_2$  depending on the physical composition of a video signal. For example, one embodiment discloses that  $S_1$  and  $S_2$  may be superimposed in the twentieth line interval of each field (of a video signal), versus a second embodiment where  $S_1$  and  $S_2$  may be superimposed on the nineteenth and twentieth line interval of each field (of a video signal, see Kanota, column 9, lines 60-63). Kanota does not limit itself in terms of where to place  $S_1$  and  $S_2$  information, but Kanota does not disclose that the placement of where copy protection information is in video signal is used for "adaptively selecting a picture format in response to said copy protection information". Moreover, Kanota does not disclose or suggest that such copy protection information is "associated with a plurality of display formats" as claimed in Claim 10.

There is no disclosure or suggestion in Kanota that describes the operation of "adaptively selecting a picture format in response to said copy protection information" where copy generation may vary according to display format, as, stated by the Examiner in the rejection.

For the reasons given above, Claim 10 is believed to overcome the rejection under 35 U.S.C. § 102(a), and Applicant requests that the rejection of this claim be withdrawn. Dependent Claims 11 to 14 are considered patentable for substantially the same reasons given above for Claim 10. Applicant therefore requests that the rejection of these claims be withdrawn as well.

#### THE 35 U.S.C. § 103 REJECTION OF CLAIMS 1 to 8

Reversal of the rejection Claims 1 to 8 under 35 U.S.C. § 103(a) over Bestler in view of Shah-Nazaroff is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

167  
A. Claim 1 claims an element of, "receiving said signal including video image information and conditional access information associated with a plurality of picture resolution formats," (emphasis added). In the rejection, the Examiner states Bestler teaches this claimed element where, "the claimed method of receiving said signal including video image information and conditional access information associated with one of a plurality of picture resolution formats is met by Payload Crypto device 50, FIG. 3," (emphasis added). Applicant notes that Claim 1 specifically claims "conditional access information associated with a plurality of picture resolution formats" not one of a plurality of picture formats, as stated by the Examiner.

OK

Moreover, nothing in Bestler discloses or suggests that the Payload Crypto device 50 is capable of receiving "conditional access information associated with a plurality of picture resolution formats" as claimed in Claim 1. As shown in Figs. 4A to 4D of Bestler with the corresponding text on column 4, lines 52 to column 9, line 35, none of these exemplary control access packets indicates where conditional access information associated with a plurality of picture resolutions would be placed. Similarly, the DCAM 20 module cited to by the Examiner in the rejection does not disclose or suggest how to consider the claimed conditional access information of Claim 1.

Hence, nothing in Bestler with Shah-Nazaroff, alone or in combination, discloses or suggests having, "conditional access information associated with a plurality of picture resolution formats," as in Claim 1.

B. Applicant's Claim 1 further provides features that are neither disclosed nor suggested by Bestler or Shah-Nazaroff, alone or in combination, namely:

"b ) decoding said conditional access information in said received signal, wherein said decoded conditional access information comprises data used for determining picture resolution formats available for at least one of:

- i) recording said video image information; and
- ii) reproducing said recorded video image information;
- c) adaptively selecting a picture resolution format in response to said decoded conditional access information," (emphasis added).

Support for this claim is found in the Applicant's specification on page 6, lines 5-7, page 7, lines 10-20, and in other places.

The Examiner, in the rejection, states that Bestler, combined with Shah-Nazaroff, anticipates the claimed feature in Claim 1 of, "adaptively selecting a picture resolution format in response to said decoded conditional access information." Applicant disagrees with Examiner's assertion. Nothing in Bester or in Shah-Nazaroff discloses or suggests, alone or in combination, the cited feature of "adaptively selecting a picture resolution format in response to said decoded conditional access information." Neither of the cited references, used by the Examiner have conditional access information comprising, "data used for determining picture resolution formats available for at least one of," recording video data, and/or reproducing said recorded video data." Without this conditional access information, the operation of "adaptively selecting a picture resolution format," (as recited in Claim 1) by the recited Bester and Shah-Nazaroff combination is not possible.



Also, the Applicant notes that the Examiner uses Bestler to suggest that depending on a desired resolution, "one or more digitally compressed television signals," may be transmitted, "over a single 6 MHz television channel." This part of the Bestler reference discloses the transport capabilities for a channel of a specific bandwidth (6MHz), where the number of signals transmitted over the channel depends on the resolution of the video signal. Bestler does not disclose or suggest how to use copy protection information, containing data used for "determining picture resolution formats available for," recording video data or reproducing recorded video data, as in Claim 1. Furthermore, nothing in Bestler discloses or suggests the use of copy protection information towards a recording operation where picture resolution formats are determined in view of conditional access information.

Likewise, nothing in Shah-Nazaroff discloses or suggests conditional access information used for, "determining picture resolution formats available for," recording video image information and/or reproducing the recorded video information, as claimed in part b of Claim 1. The Examiner states Shah-Nazaroff discloses that a viewer, "buys an upgraded media feature to be able to record a digital broadcast signal," where an additional part of the signal can be descrambled to make the broadcast recordable. Hence, Shah-Nazaroff discloses that a video signal may be descrambled via copy protection information for a recording operation; this recording operation does not consider the "picture resolutions formats available for recording operation," as in Claim 1. Furthermore, although Shah-Nazaroff discloses that a video signal may be received at a higher video resolution (col. 2, lines 21-24) that may be recorded, there is no copy protection information in the signal that is used for determining, "picture formats available for a recording operation," as in Claim 1. The video data of Shah-Nazaroff is only of a specific type of picture resolution format, as selected by a user, not "adaptively selected" in response to said decoded conditional access information" as in Claim 1.

Even if one skilled in the art would find the claimed, "decoded conditional access information comprising data used for determining picture resolution formats available," as in Claim 1, one skilled in the art would have to apply the teachings of the Applicant's invention to modify Bestler with Shah-Nazaroff to arrive at the Applicant's invention. Specifically, one would use the Applicant's invention to modify the copy protection system of Bestler to incorporate the use "decoded conditional access information comprising data used for determining picture resolution formats available," where such information is used for, "adaptively selecting a picture resolution format."

Shah-Nazaroff does not suggest or disclose how to do the aforementioned features of Claim 1.

For the reasons given above, Claim 1 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of this claim be withdrawn. Dependent Claims 2 to 8 are considered patentable for substantially the same reasons given above for Claim 1. Applicant therefore requests that the rejection of these claims be withdrawn as well.

THE 35 U.S.C. § 103 REJECTION OF CLAIM 9

Reversal of the rejection Claim 9 under 35 U.S.C. §103(a) under Bestler in view of Nagashima is respectfully requested. Dependent Claim 9 is considered patentable for substantially the same reasons given above for Claim 1, the claim that Claim 9 depends on. Applicant therefore requests that the rejection of this claim be withdrawn.

THE 35 U.S.C. § 103 REJECTION OF CLAIMS 15 to 17

Reversal of the rejection Claims 15 to 17 under 35 U.S.C. §103(a) as being unpatentable over Kanota is respectfully requested. Dependent Claim 15 to 17 are considered patentable for substantially the same reasons given above for Claim 10, the claim that Claims 15 to 17 depend on. Applicant therefore requests that the rejection of these claims be withdrawn.

THE 35 U.S.C. § 103 REJECTION OF CLAIM 18

Reversal of the rejection to Claim 18 under 35 U.S.C. §103(a) over Kanota in view of Shah-Nazaroff is respectfully requested. Dependent Claim 18 is considered patentable for substantially the same reasons given above for Claim 10, the claim that Claim 18 depends on. Applicant therefore requests that the rejection of this claim be withdrawn.

THE 35 U.S.C. § 103 REJECTION OF CLAIMS 19, 20, 22, 23, and 30 to 36

Reversal of the rejection to Claims 19, 20, 22, 23, and 30 to 36 under 35 U.S.C. §103(a) as being unpatentable over Knudson in view of Oguro is respectfully requested. The rejection makes the following crucial errors in interpreting the cited references.

Amended Claim 19 has claimed features neither suggested nor disclosed, alone or in combination, in Knudson or Oguro. Specifically, Claim 19 has, "copy protection information comprises information for determining the display formats available for recording said video image information." This type of copy protection information is not available in either Knudson or Oguro.

In the rejection, the Examiner writes that Knudson discloses the feature of, "interactive program guides that allow users to access television listings in different display formats," (column 1, lines 18-20). Applicant notes that this feature has nothing to do with, "display formats available for recording," or more specifically the display format of video image information, as claimed in the Applicant's invention that will be recorded in accordance with copy protection information.

Specifically, Knudson uses the term "display formats" to refer to the organization of grid program listings, (Knudson, column 1, lines 20-24). For example, one display format of a grid of program listing displays "program listings organized in a channel-organized list." A second described display format of a grid of program listings displays "program listings organized by time, by theme (movies, sports, etc.), or by title (i.e., alphabetically ordered)." These variations in the display of a grid of program listings is not the same as having, "copy protection information associated with one of a plurality of display formats," as claimed in Claim 19.

The Examiner, in the rejection, acknowledges that Knudson does not disclose a specific display format for recording. Examiner states that different types of recording formats are known in the art and cites to Oguro for disclosing, "a signal format and reproducing apparatus compatible with that format protect the copyright of recorded video an audio data against digital and analog recording," (Rejection, page 15, second paragraph). Applicant notes that Oguro (as with Knudson, as stated by the Examiner) does not disclose or suggest having video information that is recorded by, "adaptively selecting a display format for recording said video image information on a recording medium in response to said decoded copy protection information," as claimed in Claim 1.

Oguro discloses the idea that copy protection information may protect, "the copyright of recorded video and audio data against digital and analog dubbing," (Oguro, Abstract). This aspect of Oguro does not anticipate the claimed features of the Applicant's invention, specifically in regards to the display format of video data or having copy protection information used to select such a display format of video data information to be recorded.

For the reasons given above, Claim 19 is believed to overcome the rejection under 35 U.S.C. § 103(a), and Applicant requests that the rejection of this claim be withdrawn. Applicant also requests that the rejection to Claim 30 be withdrawn, for the same reasons given above for Claim 19. Dependent Claims 20, 22, 23 (dependent on Claim 19) and Claims 31 to 36 (dependent on Claim 30) are considered patentable for substantially the same reasons given above for Claim 19. Applicant therefore requests that the rejection of these claims be withdrawn as well.

THE 35 U.S.C. § 103 REJECTION OF CLAIMS 24 and 25

Reversal of the rejection to Claims 24 and 25 under 35 U.S.C. §103(a) over Knudson in view of Tsukamoto is respectfully requested. Dependent Claims 24 and 25 are considered patentable for substantially the same reasons given above for Claim 19, the claim that Claims 24 and 25 depend on. Applicant therefore requests that the rejection of these claims be withdrawn.

THE 35 U.S.C. § 103 REJECTION OF CLAIM 29

Reversal of the rejection to Claim 29 under 35 U.S.C. §103(a) over Knudson in view of Shah-Nazaroff is respectfully requested. Dependent Claim 29 is considered patentable for substantially the same reasons given above for Claim 19, the claim that Claim 29 depends on. Applicant therefore requests that the rejection of this claim be withdrawn.

Accordingly, the Applicant submits that the application is in condition for allowance.

Respectfully submitted,

KARL HORLANDER

By:   
Joel M. Fogelson, Attorney  
Registration No. 43,613  
609/734-6809

Patent Operations  
Thomson Multimedia Licensing, Inc.  
P.O. Box 5312

Serial No. 09/712,539

2 Independence Way  
Princeton, New Jersey 08543

December 9, 2003

APPENDIX  
CLAIMS ON APPEAL

WHAT IS CLAIMED IS:

1. A method of selecting a format for displaying video image information received in a signal including conditional access information, said method comprising the steps of:

a) receiving said signal including video image information and conditional access information associated with a plurality of picture resolution formats;

b) decoding said conditional access information in said received signal, wherein said decoded conditional access information comprises data used for determining picture resolution formats available for at least one of:

- i) recording said video image information; and
- ii) reproducing said recorded video image information;

c) adaptively selecting a picture resolution format in response to said decoded conditional access information; and

d) processing said video image information using said selected picture resolution format.

2. The method of claim 1, wherein selection of said picture resolution format is in response to said decoded conditional access information determining user entitlement to select one of said plurality of available picture resolution formats.

3. The method of claim 1, wherein said picture resolution format is one of:

- i) a standard definition format; and
- ii) a high definition format.

4. The method of claim 1, further comprising the step of recording said video image information in said selected picture resolution format on a recording medium.

5. The method of claim 4, further comprising the step of reproducing said recorded video image information in said selected picture resolution format on a display.
6. The method of claim 1, wherein said video image information of said received signal is transmitted as a digital signal on a first channel.
7. The method of claim 6, further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.
8. The method of claim 7, wherein said ancillary data is transmitted as an analog video signal.
9. The method of claim 1, wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.
10. A method of selecting a format for displaying video image information received in a signal including copy protection information, said method comprising the steps of:
  - a) receiving said signal including video image information and copy protection information associated with a plurality of display formats;
  - b) decoding said copy protection information in said received signal, wherein said copy protection information comprises data used for determining display formats available for at least one of:
    - i) recording said video image information; and
    - ii) reproducing said recorded video image information;
  - c) adaptively selecting a display format for displaying said video image information in response to said decoded copy protection information; and
  - d) processing said video image information using said selected display format.
11. The method of claim 10, wherein selection of said display format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available display formats.
12. The method of claim 10, wherein said display format is one of:
  - i) a standard definition format; and
  - ii) a high definition format.

13. The method of claim 10, further comprising the step of recording said video image information in a format determined by said decoded copy protection information on a recording medium.

14. The method of claim 13, further comprising the step of reproducing said recorded video image information in said format determined by said decoded copy protection information on a display.

15. The method of claim 10, wherein said video image information of said received signal is transmitted as a digital signal on a first channel.

16. The method of claim 15, further comprising the step of receiving ancillary data transmitted on a second channel for controlling processing of said video image data.

17. The method of claim 16, wherein said ancillary data is transmitted as an analog video signal.

18. The method of claim 10, wherein each of said plurality of display formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of display formats.

19. A method of selecting a format for recording video image information received in a signal including copy protection information, said method comprising the steps of:

- a) receiving said signal including video image information and copy protection information associated with one of a plurality of display formats;
- b) decoding said copy protection information in said received signal, wherein said copy protection information comprises information for determining the display formats available for recording said video image information;
- c) adaptively selecting a display format for recording said video image information on a recording medium in response to said decoded copy protection information; and
- d) processing said video image information using said selected display format.

20. The method of claim 19, wherein selection of said recording format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available display formats.



Serial No. 09/712,539

22. The method of claim 19, further comprising the step of recording said processed video image information in said selected display format on a recording medium.

23. The method of claim 22, further comprising the step of reproducing said recorded video image information in said selected display format for use on a display.

24. The method of claim 19, wherein said copy protection information further includes information indicating a time period during which said processed video image information is able to be reproduced.

25. The method of claim 24, wherein said time period is set in response to said decoded copy protection information determining user entitlement to select one of said plurality of available display formats.

29. The method of claim 19, wherein each of said plurality of display formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of display formats.

30. A method of selecting a format for recording video image information received in a signal including copy protection information, said method comprising the steps of:

- a) receiving said signal including video image information and copy protection information associated with a plurality of picture resolution formats;
- b) decoding said copy protection information in said received signal, wherein said copy protection information comprises information for determining the picture resolution formats available for recording said video image information;
- c) adaptively selecting a picture resolution format for recording said video image information on a recording medium in response to said decoded copy protection information; and
- d) processing said video image information using said selected picture resolution format.

Serial No. 09/712,539

31. The method of claim 30, wherein selection of said resolution format is in response to said decoded copy protection information determining user entitlement to select one of said plurality of available picture resolution formats.

32. The method of claim 30, further comprising the step of recording said processed video image information in said selected picture resolution format on a recording medium.

33. The method of claim 32, further comprising the step of reproducing said recorded video image information in said selected picture resolution format for use on a display.

34. The method of claim 30, wherein said copy protection information further includes information indicating a time period during which said processed video image information is able to be reproduced.

35. The method of claim 30, wherein said time period is set in response to said decoded copy protection information determining user entitlement to select one of said plurality of available picture resolution formats.

36. The method of claim 30, wherein each of said plurality of picture resolution formats is associated with a respective billing rate and further comprising the step of billing a user at the billing rate associated with a selected one of said plurality of picture resolution formats.